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Exhibit R-2, RDT&E Budget Item Justification: PB 2017 Navy **Date:** February 2016

Appropriation/Budget Activity 1319: <i>Research, Development, Test & Evaluation, Navy / BA 5: System Development & Demonstration (SDD)</i>	R-1 Program Element (Number/Name) PE 0605500N / <i>Multi-mssn Maritime Aircraft (MMA) (P-8A)</i>
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COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
Total Program Element	7,896.464	297.379	156.293	59.126	-	59.126	21.861	10.978	10.327	10.539	Continuing	Continuing
2696: <i>Multi-Mission Maritime Aircraft</i>	7,614.948	145.850	102.810	57.119	-	57.119	18.805	0.829	0.000	0.000	0.000	7,940.361
3181: <i>P-8A Spiral One Development</i>	176.152	66.758	39.485	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	282.395
3218: <i>P-8A Spiral 2 Development</i>	52.547	70.216	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	122.763
3368: <i>P-8 Improvements</i>	0.000	0.000	1.498	2.007	-	2.007	3.056	10.149	10.327	10.539	Continuing	Continuing
9999: <i>Congressional Adds</i>	52.817	14.555	12.500	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	79.872

Program MDAP/MAIS Code: 334

A. Mission Description and Budget Item Justification

Decrease in MULTI-MSSN MARITIME AIRCRAFT(MMA)(P-8A) by \$1.973M as required for the Department of the Navy to comply with the Bipartisan Budget Act of 2015.

The FY 2017 funding request was reduced by \$6.88M to account for the availability of prior year execution balances.

The P-8A Multi-mission Maritime Aircraft will replace the aging P-3 aircraft. The P-8A program was initiated in response to the Joint Requirements Oversight Council (JROC) validated Mission Needs Statement, "Broad Area Maritime and Littoral Armed Intelligence, Surveillance and Reconnaissance" and the requirements for the program are defined in the P-8A Capability Production Document #791-88-09, validated and approved on 22 June 2009. A successful Critical Design Review was completed in June 2007. In August 2007 the Design Readiness Review was conducted and resulted in approval to obligate funding for the fabrication of the Stage II flight test aircraft. The first flight of P-8A occurred on 25 Apr 2009. Milestone (MS) C was successfully completed on 11 August 2010. The program completed Initial Operational Test and Evaluation (IOT&E) in March 2013 and achieved Initial Operational Capability (IOC) in November 2013. The Acquisition Decision Memorandum approved entry into Full Rate Production on January 3, 2014.

The primary objectives of Systems Development and Demonstration (SDD) are to perform the system detailed design, develop and produce Systems Integration Labs, develop and build ground and flight test articles, and conduct ground and flight tests to successfully achieve program milestones. Ground testing includes the conduct of static testing, fatigue testing and Live Fire Test and Evaluation. Six flight test aircraft have been built during SDD (PU 2696). These test aircraft are grouped into two stages based on which phase of the test program the aircraft will support. SDD Stage I flight test aircraft (FY06/Qty-3) support Integrated Test and Evaluation (IT&E). SDD Stage II flight test aircraft (FY09/Qty-3) supported the completion of IT&E and Initial Operational Test and Evaluation (IOT&E) after being updated to the production configuration. The SDD contract includes the development and initial building of training devices to support IOT&E. The scope of SDD includes activities necessary

UNCLASSIFIED

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<p>to facilitate an efficient transition of the fleet to achieve the P-8A Initial Operational Capability (IOC) of SDD (PU 2696) in CY13. The scope of SDD also includes the engineering and verification of corrected deficiencies identified in testing and Fleet operational use. P-8A entered Production and Deployment phase in the 4th quarter of FY10 and entered Full Rate Production in 2nd quarter of FY14.</p> <p>P-8A program is based on an evolutionary acquisition strategy consisting of sequential incremental enhancements to system capabilities that will retain cost-wise effectiveness for winning major combat operations. In order to pace the threat, Spiral One (Increment 2), the Next Phase of Capabilities, will incorporate the following capabilities into the P-8A: Multi-Static Active Coherent (MAC), Automatic Identification System, Rapid Capabilities Insertion (RCI), updates to the Tactical Operations Center (TOC), as well as additional Anti-Submarine Warfare (ASW), Anti-Surface Warfare (ASuW) and Intelligence Surveillance and Reconnaissance capabilities as Engineering Change Proposals (ECPs). The scope of this effort includes the integration, design, ground testing (lab & aircraft) and flight test of the capability enhancements to the P-8A and associated Tactical Operations Center ground support facilities and initial trainers. Integration and test of these capabilities as well as integration of Advanced Airborne Sensor (AAS) capability will be accomplished incrementally, based on the scope of the integration effort. This includes support of Special Mission Configuration Test Program (SMCTP).</p> <p>The P-8A Spiral Two (Increment 3) program consist of sequential incremental enhancements to system capabilities that will retain cost-wise effectiveness for major combat operations. Increment 3 will incorporate improvements to aircraft systems including Combat System architecture improvements, ASW and ASuW sensor improvements, communication capability upgrades, ASuW Net Enabled Weapon (NEW), Higher-Than-Secret (HTS) security capability, and High Altitude ASW Weapons Capability (HAAWC) with datalink. Increment 3 has transferred from this PE 0605500N to PE 0605504N.</p> <p>The P-8A Multi-mission Maritime Aircraft (MMA) program also includes a sequence of RCI's and rapid development efforts to respond to evolving threats which will retain cost-wise effectiveness for winning major combat operations. In order to pace the threat, these efforts will incorporate incremental software and hardware improvements to existing sensors, communications systems, mission systems, weapons capabilities and Tactical Operations Center (TOC) to build on the P-8A capability baseline. These capabilities, and other emergent capability requirements, will be prioritized through the Navy Integration and Interoperability (I&I)-aligned Capability Prioritization Process (CPP) and P-8A Tier 3 Capability Roadmap. The CPP process will be supported by detailed analysis and the maturation of developing technologies.</p> <p>Budget Activity 5. JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under SYSTEM DEVELOPMENT AND DEMONSTRATION because it includes those projects that have passed Milestone B approval and are conducting engineering and manufacturing development tasks aimed at meeting validated requirement prior to full-rate production decision.</p>		

UNCLASSIFIED

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B. Program Change Summary (\$ in Millions)	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Previous President's Budget	306.033	247.929	238.734	-	238.734
Current President's Budget	297.379	156.293	59.126	-	59.126
Total Adjustments	-8.654	-91.636	-179.608	-	-179.608
• Congressional General Reductions	-	-0.020			
• Congressional Directed Reductions	-	-104.116			
• Congressional Rescissions	-	-			
• Congressional Adds	-	12.500			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-0.095	0.000			
• SBIR/STTR Transfer	-8.558	0.000			
• Program Adjustments	0.000	0.000	-7.169	-	-7.169
• Rate/Misc Adjustments	-0.001	0.000	-172.439	-	-172.439

Congressional Add Details (\$ in Millions, and Includes General Reductions)

Project: 9999: *Congressional Adds*

Congressional Add: *Small Business Technology Insertion*

Congressional Add Subtotals for Project: 9999

Congressional Add Totals for all Projects

	FY 2015	FY 2016
	14.555	12.500
	14.555	12.500
	14.555	12.500

Change Summary Explanation

Technical: Not applicable.

Schedule:

Project 2696: In order to clarify and better portray the actual work being performed: removed Production & Deployment line and Integrated Test & Evaluation line; renamed Correction of Deficiencies/Air to Air Refueling to Air to Air Refueling and renamed Fatigue Testing to Fatigue Testing/Air to Air Refueling and moved from Operational Evaluation to Technical Evaluation; removed FOT&E periods 2 and 3.

Project 3181: Due to delays in scheduled testing as a result of other higher priority test events; extend DT/IT from 2QFY15 to 2QFY16; move OT&E (IOC) start from 4QFY15 to 3QFY16 and end from 2QFY16 to 4QFY16; extend Integration EMD from 2QFY16 to 4QFY16. To coincide with the actual kit deliveries and installations, changed Kit Deliveries (APN) start date from 2QFY15 to 4QFY15 and end date from 1QFY18 to 3QFY17.

Project 3218: Funding transferred from PE 0605500N to PE 0605504N.

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2017 Navy										Date: February 2016		
Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0605500N / <i>Multi-mssn Maritime Aircraft (MMA) (P-8A)</i>				Project (Number/Name) 2696 / <i>Multi-Mission Maritime Aircraft</i>			
COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
2696: <i>Multi-Mission Maritime Aircraft</i>	7,614.948	145.850	102.810	57.119	-	57.119	18.805	0.829	0.000	0.000	0.000	7,940.361
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The P-8A Multi-mission Maritime Aircraft (MMA) will replace the aging P-3 aircraft. The P-8A program was initiated in response to the Joint Requirements Oversight Council (JROC) validated Mission Needs Statement (MNS), "Broad Area Maritime and Littoral Armed Intelligence, Surveillance and Reconnaissance" and the requirements for the program are defined in the P-8A Capability Production Document (CPD) #791-88-09, validated and approved on 22 June 2009. A successful Critical Design Review was completed in June 2007. In August 2007 the Design Readiness Review was conducted and resulted in approval to obligate funding for the fabrication of the Stage II flight test aircraft. The first flight of P-8A occurred on 25 Apr 2009. Milestone (MS) C was successfully completed on 11 August 2010. The program completed Initial Operational Test and Evaluation (IOT&E) in March 2013 and achieved Initial Operational Capability (IOC) in November 2013. The Acquisition Decision Memorandum approved entry into Full Rate Production on January 3, 2014.

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Title: Continue System Development & Demonstration	123.556	82.299	53.175	0.000	53.175
Articles:	-	-	-	-	-
FY 2015 Accomplishments: SDD phase. Scope of effort included: engineering for identified deficiencies, support and updates to ground and flight test articles (Stage I and II), conducted fatigue testing, updated and tested Tactical Operations Center (TOC) Systems and training systems, continued horizontal stabilizer static testing and fatigue testing, conducted Integrated Test and Evaluation (IT&E), Follow-On Operational Test & Evaluation (FOT&E)/Verification					

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2017 Navy		Date: February 2016
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0605500N / <i>Multi-mssn Maritime Aircraft (MMA) (P-8A)</i>	Project (Number/Name) 2696 / <i>Multi-Mission Maritime Aircraft</i>

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
<p>of Corrected Deficiencies (VCD), and Air to Air Refueling (AAR). Conducted periodic cost and schedule performance reviews associated with EVM and prepared and conducted technical, test and logistic reviews.</p> <p>FY 2016 Plans: SDD phase. Scope of effort includes: engineering for identified and prioritized deficiencies, support and update to ground and flight test articles (Stage I and II), continuation of fatigue testing, AAR, and completion of horizontal stabilizer static testing.</p> <p>FY 2017 Base Plans: SDD phase. Scope of effort includes: support and update to ground and flight test articles (Stage I and II), continuation of fatigue testing, AAR, and completion of horizontal stabilizer static testing.</p> <p>FY 2017 OCO Plans: N/A</p>					
<p>Title: Continue Engineering and Technical Development and Test for Sys Dev & Demonstration contracts</p> <p align="right">Articles:</p> <p>FY 2015 Accomplishments: Continued analysis of contracted deliverables; directed technical and logistic support of system development test aircraft; performed engineering and verification of corrected deficiencies; fatigue and horizontal stabilizer testing; evaluated contract cost, schedule, and performance; conducted test preparations; provided necessary government furnished equipment and test articles, performed risk assessment/mitigation, program control, and performance status. Conducted and supported IT&E and FOT&E /VCD.</p> <p>FY 2016 Plans: Continue analysis of contracted deliverables; direct technical and logistic support of system development test aircraft; engineering for correction of deficiencies; verification of corrected deficiencies; fatigue testing; horizontal stabilizer testing; evaluate contract cost, schedule, and performance; test preparations, provide necessary government furnished equipment and test articles, risk assessment/mitigation; program control; and performance status. Conduct and support IT&E and FOT&E/VCD.</p> <p>FY 2017 Base Plans: Continue analysis of contracted deliverables; direct technical and logistic support of system development test aircraft; Air to Air Refueling testing; fatigue testing; horizontal stabilizer testing; evaluate contract cost, schedule,</p>	22.294 -	20.511 -	3.944 -	0.000 -	3.944 -

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2017 Navy **Date:** February 2016

Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0605500N / <i>Multi-mssn Maritime Aircraft (MMA) (P-8A)</i>	Project (Number/Name) 2696 / <i>Multi-Mission Maritime Aircraft</i>
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
and performance; test preparations, provide necessary government furnished equipment and test articles, risk assessment/mitigation; program control; and performance status. Conduct and support IT&E and FOT&E/VCD.					
FY 2017 OCO Plans: N/A					
Accomplishments/Planned Programs Subtotals	145.850	102.810	57.119	0.000	57.119

C. Other Program Funding Summary (\$ in Millions)											
<u>Line Item</u>	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
• APN1/0193: <i>P-8A MMA</i>	2,171.144	3,228.333	2,063.378	-	2,063.378	1,532.058	2,613.458	97.200	0.000	0.000	23,332.327
• APN6/0605: <i>P-8A Initial Spares</i>	0.228	1.569	44.700	-	44.700	0.776	24.121	0.000	0.000	0.000	498.927
• MILCON: <i>P-8A MILCON</i>	52.216	82.418	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	342.759

Remarks

D. Acquisition Strategy
 The MMA Milestone 0 was approved 22 March 2000 and the resulting Acquisition Decision Memorandum directed P-8A to begin the Concept Exploration phase consisting of an Analysis of Alternatives and industry concept studies. These activities began 3Q/01 and were funded under Program Element 0702207N Project Unit W2737. Approval to enter Component Advance Development (CAD) was attained from the Overarching Integrated Product Team on 18 Jan 2002 and the Milestone Decision Authority Under Secretary of Defense for Acquisition, Technology, & Logistics approved the program Acquisition Strategy on 8 Feb 2002. The CAD was a competitive award to multiple contractors to define alternative MMA concept system architectures and evaluate associated risks and proposed mitigations. Selection of MMA concept and approval to enter SDD phase occurred at MS B decision review on 28 May 2004. The contract was awarded to Boeing on 14 June 2004. The SDD phase is being used to design, develop and test the P-8A system. The P-8A program was initiated in response to the Joint Requirements Oversight Council validated Mission Needs Statement, "Broad Area Maritime and Littoral Armed Intelligence, Surveillance and Reconnaissance" and the requirements for the program are defined in the Capability Production Document. MS C was successfully completed on 11 August 2010 approving entry into the Production and Deployment Phase. P-8A Initial Operational Capability achieved in November 2013. Entry into Full Rate Production was approved on 3 January 2014.

E. Performance Metrics
 Completed first period of Follow-On Test & Evaluation (FOT&E) and Verification of Corrected Deficiencies (VCD) in 2nd quarter 2014.

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Navy **Date:** February 2016

Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0605500N / Multi-mssn Maritime Aircraft (MMA) (P-8A)	Project (Number/Name) 2696 / Multi-Mission Maritime Aircraft
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Product Development (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Primary HW Dev - Boeing	C/CPAF	Boeing : Seattle, WA	6,757.014	117.885	Oct 2014	78.050	Oct 2015	52.081	Oct 2016	-		52.081	16.592	7,021.622	7,021.622
Sys Eng (gov)	WR	NAWC AD : Pax River, MD	70.715	5.671	Nov 2014	4.249	Nov 2015	1.094	Nov 2016	-		1.094	0.000	81.729	-
Prior year Prod Dev cost no longer funded in the FYDP	Various	Various : Various	319.530	0.000		0.000		0.000		-		0.000	0.000	319.530	-
Subtotal			7,147.259	123.556		82.299		53.175		-		53.175	16.592	7,422.881	-

Remarks

The total award fee issued to date is 2.6% of the total budget.

Support (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Int. Log Gov	WR	NAWC AD : Pax River, MD	43.295	0.423	Nov 2014	0.445	Nov 2015	0.086	Nov 2016	-		0.086	0.000	44.249	-
Int. Log Gov	WR	NAWC TSD : Orlando, FL	14.673	0.135	Nov 2014	0.000		0.000		-		0.000	0.000	14.808	-
Tech Dev Gov	WR	NAWC AD : Pax River, MD	74.509	1.584	Nov 2014	1.541	Nov 2015	0.162	Nov 2016	-		0.162	0.076	77.872	-
Prior year Support cost no longer funded in the FYDP	Various	Various : Various	16.561	0.000		0.000		0.000		-		0.000	0.000	16.561	-
Subtotal			149.038	2.142		1.986		0.248		-		0.248	0.076	153.490	-

Test and Evaluation (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Dev T&E - Gov	WR	NAWC AD : Pax River, MD	83.351	10.047	Nov 2014	9.284	Nov 2015	1.525	Nov 2016	-		1.525	0.167	104.374	-

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Navy **Date:** February 2016

Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0605500N / Multi-mssn Maritime Aircraft (MMA) (P-8A)	Project (Number/Name) 2696 / Multi-Mission Maritime Aircraft
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Test and Evaluation (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
GFE & GFI	WR	NAWC AD : Pax River, MD	81.353	3.683	Nov 2014	4.000	Nov 2015	0.821	Nov 2016	-		0.821	0.000	89.857	-
LFT&E - Gov	WR	NAWC WD : China Lake	28.984	0.000		0.000		0.000		-		0.000	0.000	28.984	-
Oper Test & Eval	WR	NAWC AD : Pax River, MD	5.114	1.170	Nov 2014	1.000	Nov 2015	0.416	Nov 2016	-		0.416	0.000	7.700	-
Prior year T&E cost no longer funded in the FYDP	Various	Various : Various	10.487	0.000		0.000		0.000		-		0.000	0.000	10.487	-
Subtotal			209.289	14.900		14.284		2.762		-		2.762	0.167	241.402	-

Management Services (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Mgmt Suppt Serv (NON-FFRDC)	C/CPFF	RBC INC : Alexandria, VA	29.477	0.622	Nov 2014	0.614	Nov 2015	0.311	Nov 2016	-		0.311	0.311	31.335	31.335
Eng Tech Serv (NON-FFRDC)	C/CPFF	ASEC : Lexington Park MD	10.745	0.400	Nov 2014	0.400	Nov 2015	0.200	Nov 2016	-		0.200	0.200	11.945	11.945
Program Mgmt Support	WR	NAWC AD : Pax River, MD	45.073	4.105	Nov 2014	3.102	Nov 2015	0.360	Nov 2016	-		0.360	0.274	52.914	-
Travel	Allot	NAWC AD : Pax River, MD	3.709	0.125	Nov 2014	0.125	Nov 2015	0.063	Nov 2016	-		0.063	0.000	4.022	-
Prior year Mgmt cost no longer funded in the FYDP	Various	Various : Various	20.358	0.000		0.000		0.000		-		0.000	0.000	20.358	-
Subtotal			109.362	5.252		4.241		0.934		-		0.934	0.785	120.574	-

	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract	
Project Cost Totals		7,614.948	145.850	102.810	57.119	-	57.119	17.620	7,938.347	-

Remarks

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2017 Navy **Date:** February 2016

Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0605500N / Multi-mssn Maritime Aircraft (MMA) (P-8A)	Project (Number/Name) 2696 / Multi-Mission Maritime Aircraft
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Multi-Mission Maritime Aircraft	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Systems Development																												
Hardware/Software Development	Air to Air Refueling																											
Test & Evaluation																												
Technical Evaluation	Fatigue Testing / Air to Air Refueling																											
Production Milestones																												
LRIP																												
FRP																												
Deliveries																												
LRIP/FRP Aircraft (APN)																												
LRIP 3	3	2	2																									
LRIP 4			2	3	3	4	1																					
FRP 1							3	4	4	4	1																	
FRP 2											2	4	3															
FRP 3														3	4	4	6											
FRP 4																	3	3	3	2								
FRP 5																				2	1	2	1					
FRP 6																										3	3	3

2017PB - 0605500N - 2696

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2017 Navy		Date: February 2016
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0605500N / <i>Multi-mssn Maritime Aircraft (MMA) (P-8A)</i>	Project (Number/Name) 2696 / <i>Multi-Mission Maritime Aircraft</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Multi-Mission Maritime Aircraft</i>				
Systems Development: Hardware/Software Development: Air to Air Refueling	1	2015	4	2018
Test & Evaluation: Technical Evaluation: Fatigue Testing / Air to Air Refueling	1	2015	4	2018
Production Milestones: Low Rate Initial Production (LRIP)	1	2015	3	2016
Production Milestones: Full Rate Production (FRP)	1	2015	4	2021
Deliveries: LRIP 3: LRIP Aircraft (APN) Q1 2015	1	2015	1	2015
Deliveries: LRIP 3: LRIP Aircraft (APN) Q2 2015	2	2015	2	2015
Deliveries: LRIP 3: LRIP Aircraft (APN) Q3 2015	3	2015	3	2015
Deliveries: LRIP 4: LRIP Aircraft (APN) Q3 2015	3	2015	3	2015
Deliveries: LRIP 4: LRIP Aircraft (APN) Q4 2015	4	2015	4	2015
Deliveries: LRIP 4: LRIP Aircraft (APN) Q1 2016	1	2016	1	2016
Deliveries: LRIP 4: LRIP Aircraft (APN) Q2 2016	2	2016	2	2016
Deliveries: LRIP 4: LRIP Aircraft (APN) Q3 2016	3	2016	3	2016
Deliveries: FRP 1: FRP Aircraft (APN) Q3 2016	3	2016	3	2016
Deliveries: FRP 1: FRP Aircraft (APN) Q4 2016	4	2016	4	2016
Deliveries: FRP 1: FRP Aircraft (APN) Q1 2017	1	2017	1	2017
Deliveries: FRP 1: FRP Aircraft (APN) Q2 2017	2	2017	2	2017
Deliveries: FRP 1: FRP Aircraft (APN) Q3 2017	3	2017	3	2017
Deliveries: FRP 2: FRP Aircraft (APN) Q3 2017	3	2017	3	2017
Deliveries: FRP 2: FRP Aircraft (APN) Q4 2017	4	2017	4	2017
Deliveries: FRP 2: FRP Aircraft (APN) Q1 2018	1	2018	1	2018
Deliveries: FRP 3: FRP Aircraft (APN) Q2 2018	2	2018	2	2018

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Exhibit R-4A, RDT&E Schedule Details: PB 2017 Navy **Date:** February 2016

Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0605500N / <i>Multi-mssn Maritime Aircraft (MMA) (P-8A)</i>	Project (Number/Name) 2696 / <i>Multi-Mission Maritime Aircraft</i>
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Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Deliveries: FRP 3: FRP Aircraft (APN) Q3 2018	3	2018	3	2018
Deliveries: FRP 3: FRP Aircraft (APN) Q4 2018	4	2018	4	2018
Deliveries: FRP 3: FRP Aircraft (APN) Q1 2019	1	2019	1	2019
Deliveries: FRP 4: FRP Aircraft (APN) Q2 2019	2	2019	2	2019
Deliveries: FRP 4: FRP Aircraft (APN) Q3 2019	3	2019	3	2019
Deliveries: FRP 4: FRP Aircraft (APN) Q4 2019	4	2019	4	2019
Deliveries: FRP 4: FRP Aircraft (APN) Q1 2020	1	2020	1	2020
Deliveries: FRP 5: FRP Aircraft (APN) Q2 2020	2	2020	2	2020
Deliveries: FRP 5: FRP Aircraft (APN) Q3 2020	3	2020	3	2020
Deliveries: FRP 5: FRP Aircraft (APN) Q4 2020	4	2020	4	2020
Deliveries: FRP 5: FRP Aircraft (APN) Q1 2021	1	2021	1	2021
Deliveries: FRP 6: FRP Aircraft (APN) Q2 2021	2	2021	2	2021
Deliveries: FRP 6: FRP Aircraft (APN) Q3 2021	3	2021	3	2021
Deliveries: FRP 6: FRP Aircraft (APN) Q4 2021	4	2021	4	2021

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Navy										Date: February 2016		
Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0605500N / <i>Multi-mssn Maritime Aircraft (MMA) (P-8A)</i>				Project (Number/Name) 3181 / <i>P-8A Spiral One Development</i>			
COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
3181: <i>P-8A Spiral One Development</i>	176.152	66.758	39.485	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	282.395
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The P-8A Multi-mission Maritime Aircraft (MMA) program is based on an evolutionary acquisition strategy consisting of sequential incremental enhancements to system capabilities that will retain cost-wise effectiveness for winning major combat operations. In order to pace the threat, Spiral One (Increment 2), the Next Phase of Capabilities (NPC-1), will incorporate the following capabilities into the P-8A: Multi-Static Active Coherent (MAC), Automatic Identification System (AIS), Rapid Capabilities Insertion (RCI), updates to the Tactical Operations Center (TOC), as well as additional Anti-Submarine Warfare (ASW), Anti-Surface Warfare (ASuW) and Intelligence Surveillance and Reconnaissance (ISR) capabilities. Increment 2 will be executed as an Engineering Change Proposal (ECP) to the baseline program.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Title: Perform technology demonstrations and analyses of proposed new capabilities	46.715	28.088	0.000	0.000	0.000
Articles:	-	-	-	-	-
FY 2015 Accomplishments: Continued development of integration design of new P-8A capabilities. Achieved MAC Early Operational Capability. Conducted laboratory and development testing. Incrementally funded primary Integration/EMD contract for comprehensive design, installation, test and initial fielding of all Spiral One (Increment 2) capabilities such as MAC, AIS, and RCI. Maintained integration alignment with external development programs.					
FY 2016 Plans: Complete development of integration design of new P-8A capabilities. Complete laboratory and development testing. Incrementally fund primary Integration/EMD contract for comprehensive design, installation, test and initial fielding of all Spiral One (Increment 2) capabilities such as MAC, AIS, and RCI. Maintain integration alignment with external development programs. Achieve ECP2 Initial Operational Capability.					
FY 2017 Base Plans: N/A					
FY 2017 OCO Plans: N/A					
Title: Conduct technical, cost, risk and logistics analysis of proposed technologies	20.043	11.397	0.000	0.000	0.000
Articles:	-	-	-	-	-

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Navy		Date: February 2016
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0605500N / Multi-mssn Maritime Aircraft (MMA) (P-8A)	Project (Number/Name) 3181 / P-8A Spiral One Development

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
<p><i>FY 2015 Accomplishments:</i> Conducted technical, cost, risk and logistics analysis of proposed technologies. Provided technical and management support for the development of acquisition documentation. Provided engineering and management of technical development effort. Conducted flight testing of Spiral One (Increment 2) capabilities. Provided technical and management support for the development of training courseware.</p> <p><i>FY 2016 Plans:</i> Complete technical, cost, risk and logistics analysis of proposed technologies. Complete technical and management support for the development of acquisition documentation. Complete engineering and management of technical development effort. Complete flight testing of Spiral One (Increment 2) capabilities. Complete technical and management support for the development of training courseware.</p> <p><i>FY 2017 Base Plans:</i> N/A</p> <p><i>FY 2017 OCO Plans:</i> N/A</p>					
Accomplishments/Planned Programs Subtotals	66.758	39.485	0.000	0.000	0.000

C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
• APN5/0586: P-8 Series	29.797	28.092	18.836	-	18.836	18.642	206.008	198.574	202.575	2,631.992	3,347.000

Remarks
BLI0586 reflects the P-8A total program funding not just Increment 2

D. Acquisition Strategy
The P-8A MMA program is based on an evolutionary acquisition strategy consisting of sequential incremental enhancements to system capabilities that will retain cost-wise effectiveness for winning major combat operations. As part of the P-8A evolutionary acquisition strategy, Spiral One (Increment 2) will incorporate the capabilities defined in the Capability Development Document approved by JROC on 25 June 2010. Next Phase of Capabilities (NPC-1) will incorporate the following capabilities into the P-8A: Multi-Static Active Coherent, Rapid Capabilities Insertion, updates to the Tactical Operations Center, as well as additional Anti-Submarine Warfare, Anti-Surface Warfare and Intelligence Surveillance and Reconnaissance capabilities.

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Navy		Date: February 2016
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0605500N / <i>Multi-mssn Maritime Aircraft (MMA) (P-8A)</i>	Project (Number/Name) 3181 / <i>P-8A Spiral One Development</i>

E. Performance Metrics

Approval of Spiral One (Increment 2) Engineering Change Proposals (ECPs).

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Navy **Date:** February 2016

Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0605500N / Multi-mssn Maritime Aircraft (MMA) (P-8A)	Project (Number/Name) 3181 / P-8A Spiral One Development
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Product Development (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Primary HW Dev - Integration/EMD	C/CPFF	Boeing : Seattle, WA	72.910	40.583	Nov 2014	23.240	Nov 2015	0.000		-		0.000	0.000	136.733	136.733
Sys Eng (gov)	WR	NAWC AD : Pax River, MD	33.422	6.132	Nov 2014	4.848	Nov 2015	0.000		-		0.000	0.000	44.402	-
Prior year Prod Dev cost no longer funded in the FYDP	Various	Various : Various	23.454	0.000		0.000		0.000		-		0.000	0.000	23.454	-
Subtotal			129.786	46.715		28.088		0.000		-		0.000	0.000	204.589	-

Support (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Integrated Logistics Sup	WR	NAWC AD : Pax River, MD	3.018	0.728	Nov 2014	0.723	Nov 2015	0.000		-		0.000	0.000	4.469	-
Prior year Support cost no longer funded in the FYDP	Various	Various : Various	0.742	0.000		0.000		0.000		-		0.000	0.000	0.742	-
Subtotal			3.760	0.728		0.723		0.000		-		0.000	0.000	5.211	-

Test and Evaluation (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Dev Test & Eval	WR	NAWC AD : Pax River, MD	14.702	8.475	Nov 2014	0.000		0.000		-		0.000	0.000	23.177	-
GFE/GFI/GFP	WR	NAWC AD : Pax River, MD	14.101	6.627	Nov 2014	6.600	Nov 2015	0.000		-		0.000	0.000	27.328	-
Oper Test & Eval	WR	NAWC AD : Pax River, MD	0.000	2.544	Nov 2014	2.600	Nov 2015	0.000		-		0.000	0.000	5.144	-
Subtotal			28.803	17.646		9.200		0.000		-		0.000	0.000	55.649	-

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Exhibit R-4, RDT&E Schedule Profile: PB 2017 Navy **Date:** February 2016

Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0605500N / Multi-mssn Maritime Aircraft (MMA) (P-8A)	Project (Number/Name) 3181 / P-8A Spiral One Development
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P-8A Spiral One Development	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021							
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q				
Acquisition Milestones																																
Milestones	EOC ▲								IOC ▲																							
Systems Development																																
Acquisition Phases	Integration/EMD																															
Test & Evaluation																																
Technical Evaluation	DT/IT																															
Operational Evaluation	OT&E (EOC)								OT&E (IOC)																							
Production Milestones																																
Contract Awards					RETROFIT KITS (ECP2) ●																											
Deliveries																																
									Kit Deliveries (APN)																							

2017DON - 0605500N - 3181

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Exhibit R-4A, RDT&E Schedule Details: PB 2017 Navy		Date: February 2016
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0605500N / <i>Multi-mssn Maritime Aircraft (MMA) (P-8A)</i>	Project (Number/Name) 3181 / <i>P-8A Spiral One Development</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>P-8A Spiral One Development</i>				
Acquisition Milestones: Milestones: Early Operational Capability (EOC)	2	2015	2	2015
Acquisition Milestones: Milestones: Initial Operational Capability (IOC)	4	2016	4	2016
Systems Development: Acquisition Phases: Integration/EMD	1	2015	4	2016
Test & Evaluation: Technical Evaluation: Developmental Testing (Integration Testing)	1	2015	2	2016
Test & Evaluation: Operational Evaluation: Operational Test & Evaluation (OT&E) (EOC)	1	2015	2	2015
Test & Evaluation: Operational Evaluation: Operational Test & Evaluation (OT&E) (IOC)	3	2016	4	2016
Production Milestones: Contract Awards: Retrofit Kits (ECP2)	3	2015	3	2015
Deliveries: Kit Deliveries (APN)	4	2015	3	2017

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Navy										Date: February 2016		
Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0605500N / <i>Multi-mssn Maritime Aircraft (MMA) (P-8A)</i>				Project (Number/Name) 3218 / <i>P-8A Spiral 2 Development</i>			
COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
3218: <i>P-8A Spiral 2 Development</i>	52.547	70.216	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	122.763
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The P-8A Increment 3 program consist of sequential incremental enhancements to system capabilities that will retain cost-wise effectiveness for major combat operations. Increment 3 will incorporate improvements to aircraft systems including Combat System architecture improvements, ASW and ASuW sensor improvements, communication capability upgrades, ASuW Net Enabled Weapon (NEW), Higher-Than-Secret (HTS) security capability, and High Altitude ASW Weapons Capability (HAAWC) with datalink. Increment 3 has transferred from this PE 0605500N to PE 0605504N.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Title: Perform technology demonstrations and analyses of proposed new capabilities	62.858	0.000	0.000	0.000	0.000
Articles:	-	-	-	-	-
FY 2015 Accomplishments: Increased government led Lead Capability Integrator (LCI) Spiral 2 (Increment 3) architecture prototyping, capability prototyping, and integration analysis efforts. Increased government led engineering efforts to support initial Spiral 2 (Increment 3) execution of Applications Based Architecture competitive software development contracts. Executed Spiral 2 (Increment 3) Risk Reduction Interface contracting efforts. Developed and initiate execution of Risk Reduction Capabilities Analysis contract effort in preparation for Increment 3 program FY16 System Requirements Review (SRR) System Engineering Technical Review (SETR) event. Continued engineering ramp up of Capability Development and Integration efforts to include MAC Enhancements, Net Enabled Weapon, and Sensor Upgrades. Continued P-8A TOC design and integration efforts.					
FY 2016 Plans: Continue execution of Spiral 2 (Increment 3) Applications Based Architecture (ABA) system development, Risk Reduction Interface and Capability Analysis contracting efforts. Develop and award competitive Wide Band SATCOM system hardware procurement contract. Continue Lead Capability Integrator (LCI) Spiral 2 (Increment 3) core Combat System architecture prototyping, capability application prototyping, and integration analysis efforts. Continue Capability Development and Integration Engineering Change Proposal (ECP) maturity efforts to include Anti-Submarine Warfare (ASW) capability, Wide Band SATCOM, Net Enabled Weapon, and Sensor Upgrades. Continue P-8A TOC design and integration efforts. Prepare, create, and conduct program Milestone activities in preparation of formal "Ready For Proposal (RFP) Release" Milestone. Prepare and execute all					

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Navy		Date: February 2016
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0605500N / <i>Multi-mssn Maritime Aircraft (MMA) (P-8A)</i>	Project (Number/Name) 3218 / <i>P-8A Spiral 2 Development</i>

C. Other Program Funding Summary (\$ in Millions)

Line Item	FY 2015	FY 2016	FY 2017	FY 2017	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Cost To	
			Base	OCO	Total					Complete	Total Cost
• APN5/0586: <i>P-8 Series</i>	29.797	28.092	18.836	-	18.836	18.642	206.008	198.574	202.575	2,631.992	3,347.000

Remarks

BLI0586 reflects total P-8A funding not just Increment 3. This BLI has moved to new PE 0605504N.

D. Acquisition Strategy

As part of the Increment 3 evolutionary acquisition strategy, Spiral 2 (Increment 3) will incorporate the capabilities defined in the JROC approved P-8A Increment 3 Capability Development Document. These capabilities will be developed as a series of ECP's for the P-8A and Tactical Operations Center (ground support facility) similar to the approach used for Increment 2.

E. Performance Metrics

Continue development of architectural prototyping and maturity of capability ECPs.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Navy **Date:** February 2016

Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0605500N / Multi-mssn Maritime Aircraft (MMA) (P-8A)	Project (Number/Name) 3218 / P-8A Spiral 2 Development
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Product Development (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Primary Hdw Dev - RR Interface	C/CPIF	Boeing : Seattle	3.344	5.717	Jan 2015	0.000		0.000		-		0.000	0.000	9.061	9.061
Primary HW Dev - Capability Analysis	C/CPFF	Boeing : Seattle	0.167	5.000	Jul 2015	0.000		0.000		-		0.000	0.000	5.167	5.167
Primary HW Dev - Capability Dev & Integration	C/CPFF	Boeing : Seattle	0.000	0.000		0.000		0.000		-		0.000	0.000	0.000	-
Primary HW Dev - ABA SW Dev Vendor A	C/CPIF	Raytheon : Dallas, TX	1.624	8.000	Feb 2015	0.000		0.000		-		0.000	0.000	9.624	9.624
Primary HW Dev - ABA SW Dev Vendor B	C/CPIF	Lockheed Martin : Manassas, VA	1.624	8.000	Feb 2015	0.000		0.000		-		0.000	0.000	9.624	9.624
Primary HW Dev - Combat Systems	TBD	TBD : TBD	0.000	0.000		0.000		0.000		-		0.000	0.000	0.000	-
Primary HW Dev - Platform Integration	C/CPFF	Boeing : Seattle	0.000	0.000		0.000		0.000		-		0.000	0.000	0.000	-
Primary HW Dev - Prototyping	Various	Various : Various	1.440	1.000	Mar 2015	0.000		0.000		-		0.000	0.000	2.440	-
Primary HW Dev - MAC Enhancements	Various	Various : Various	11.755	11.000	Nov 2014	0.000		0.000		-		0.000	0.000	22.755	-
Primary HW Dev - Wideband SATCOM	TBD	TBD : TBD	0.000	0.000		0.000		0.000		-		0.000	0.000	0.000	-
RCI2 - ECP3	C/CPIF	Boeing : Seattle	0.000	7.716	Dec 2014	0.000		0.000		-		0.000	0.000	7.716	7.716
LCI Development & Integration	WR	NAWC AD : Pax River, MD	0.202	8.003	Nov 2014	0.000		0.000		-		0.000	0.000	8.205	-
Sys Eng (gov)	WR	NAWC AD : Pax River, MD	18.092	8.422	Nov 2014	0.000		0.000		-		0.000	0.000	26.514	-
Prior year Prod dev no longer funded in the FYDP	Various	Various : Various	3.665	0.000		0.000		0.000		-		0.000	0.000	3.665	-
Subtotal			41.913	62.858		0.000		0.000		-		0.000	0.000	104.771	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Navy												Date: February 2016				
Appropriation/Budget Activity				R-1 Program Element (Number/Name)				Project (Number/Name)								
1319 / 5				PE 0605500N / Multi-mssn Maritime Aircraft (MMA) (P-8A)				3218 / P-8A Spiral 2 Development								
Support (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Integrated Logistics Sup	WR	NAWC AD : Pax River, MD	1.146	0.685	Nov 2014	0.000		0.000		-		0.000	0.000	1.831	-	
Studies & Analysis	C/CPFF	JHU : Pax River, MD	1.681	0.763	Nov 2014	0.000		0.000		-		0.000	0.000	2.444	2.444	
Subtotal			2.827	1.448		0.000		0.000		-		0.000	0.000	4.275	-	
Test and Evaluation (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Dev Test & Eval	WR	NAWC AD : Pax River, MD	0.554	0.883	Nov 2014	0.000		0.000		-		0.000	0.000	1.437	-	
GFE/GFI/GFP	WR	NAWC AD : Pax River, MD	0.000	0.000		0.000		0.000		-		0.000	0.000	0.000	-	
Oper Test & Eval	WR	NAWC AD : Pax River, MD	0.000	0.000		0.000		0.000		-		0.000	0.000	0.000	-	
Test Assets	WR	NAWC AD : Pax River, MD	0.000	0.000		0.000		0.000		-		0.000	0.000	0.000	-	
Subtotal			0.554	0.883		0.000		0.000		-		0.000	0.000	1.437	-	
Management Services (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Eng Tech Serv (NON-FFRDC)	C/CPFF	Various : Various	2.349	0.934	Nov 2014	0.000		0.000		-		0.000	0.000	3.283	3.283	
Mgmt Suppt Serv (NON-FFRDC)	C/CPFF	RBC : Alexandria, VA	2.989	2.471	Nov 2014	0.000		0.000		-		0.000	0.000	5.460	5.460	
Program Mgmt Support	WR	NAWC AD : Pax River, MD	1.910	1.522	Nov 2014	0.000		0.000		-		0.000	0.000	3.432	-	
Travel	Allot	NAWC AD : Pax River, MD	0.005	0.100	Oct 2014	0.000		0.000		-		0.000	0.000	0.105	-	

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Exhibit R-4A, RDT&E Schedule Details: PB 2017 Navy		Date: February 2016
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0605500N / <i>Multi-mssn Maritime Aircraft (MMA) (P-8A)</i>	Project (Number/Name) 3218 / <i>P-8A Spiral 2 Development</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>P-8A Spiral 2 Development</i>				
Systems Development: ABA Software Development and Prototyping	1	2015	4	2015
Systems Development: Capability Analysis, Development & Integration	3	2015	4	2015
Contract Awards: Contract Award - ABA Software Development	1	2015	1	2015
Contract Awards: Contract Award - Capability Analysis	3	2015	3	2015

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Navy **Date:** February 2016

Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0605500N / Multi-mssn Maritime Aircraft (MMA) (P-8A)	Project (Number/Name) 3368 / P-8 Improvements
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COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
3368: P-8 Improvements	0.000	0.000	1.498	2.007	-	2.007	3.056	10.149	10.327	10.539	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The P-8A Multi-mission Maritime Aircraft (MMA) program also includes a sequence of Rapid Capability Insertions (RCI) and rapid development efforts to respond to evolving threats which will retain cost-wise effectiveness for winning major combat operations. In order to pace the threat, these efforts will incorporate incremental software and hardware improvements to existing sensors, communications systems, mission systems, weapons capabilities and Tactical Operations Center (TOC)/TACMobile to build on the P-8A capability baseline. These capabilities, and other emergent capability requirements, will be prioritized either through the Navy Integration and Interoperability (I&I)-aligned Capability Prioritization Process (CPP), P-8A Tier 3 Capability Roadmap and/or through an Urgent Operational Need. The CPP process will be supported by detailed analysis and the maturation of developing technologies.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
<p>Title: Perform technology demonstrations and analyses of proposed new capabilities</p> <p align="right">Articles:</p> <p>FY 2015 Accomplishments: N/A</p> <p>FY 2016 Plans: Develop Rapid Capability Insertions to incorporate incremental software and hardware improvements to build on the P-8A capability baseline.</p> <p>FY 2017 Base Plans: Develop Rapid Capability Insertions to incorporate incremental software and hardware improvements to build on the P-8A capability baseline.</p> <p>FY 2017 OCO Plans: N/A</p>	0.000	1.170	1.582	0.000	1.582
<p>Title: Conduct technical, cost, risk and logistics analysis of proposed technologies</p> <p align="right">Articles:</p> <p>FY 2015 Accomplishments: N/A</p> <p>FY 2016 Plans:</p>	0.000	0.328	0.425	0.000	0.425

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Navy		Date: February 2016
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0605500N / <i>Multi-mssn Maritime Aircraft (MMA) (P-8A)</i>	Project (Number/Name) 3368 / <i>P-8 Improvements</i>

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
<p>Conduct technical, cost, risk and logistics analysis of proposed technologies. Evaluate system requirements through cost/performance trade-off analysis. Provide technical and management support for the development of acquisition documentation. Provide engineering and management of technical development effort. Increase in government led prototyping.</p> <p>FY 2017 Base Plans: Conduct technical, cost, risk and logistics analysis of proposed technologies. Evaluate system requirements through cost/performance trade-off analysis. Provide technical and management support for the development of acquisition documentation. Provide engineering and management of technical development effort. Increase in government led prototyping.</p> <p>FY 2017 OCO Plans: N/A</p>					
Accomplishments/Planned Programs Subtotals	0.000	1.498	2.007	0.000	2.007

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

The P-8A Multi-mission Maritime Aircraft (MMA) program also includes a sequence of Rapid Capability Insertions (RCI) and rapid development efforts to respond to evolving threats which will retain cost-wise effectiveness for winning major combat operations beyond 2020. In order to pace the threat, these efforts will incorporate incremental software and hardware improvements to existing sensors, communications systems, mission systems, weapons capabilities and Tactical Operations Center (TOC) to build on the P-8A capability baseline. These capabilities, and other emergent capability requirements, will be prioritized through the Navy Integration and Interoperability (I&I)-aligned Capability Prioritization Process (CPP), P-8A Tier 3 Capability Roadmap and/or through an Urgent Operational Need. The CPP process will be supported by detailed analysis and the maturation of developing technologies.

E. Performance Metrics

Complete ABA prototyping on capabilities beyond Increment 3.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Navy												Date: February 2016			
Appropriation/Budget Activity				R-1 Program Element (Number/Name)					Project (Number/Name)						
1319 / 5				PE 0605500N / Multi-mssn Maritime Aircraft (MMA) (P-8A)					3368 / P-8 Improvements						
Product Development (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Primary HW Dev - P-8A Improvements	TBD	TBD : TBD	0.000	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Sys Eng - Gov	WR	NAWCAD : Pax River, MD	0.000	0.000		1.170	Nov 2015	1.582	Nov 2016	-		1.582	Continuing	Continuing	Continuing
Subtotal			0.000	0.000		1.170		1.582		-		1.582	-	-	-
Support (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Integrated Logistics Support	WR	NAWCAD : Pax River, MD	0.000	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Subtotal			0.000	0.000		0.000		0.000		-		0.000	-	-	-
Test and Evaluation (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Dev T&E - Gov	WR	NAWCAD : Pax River, MD	0.000	0.000		0.000		0.000		-		0.000	0.000	0.000	-
Subtotal			0.000	0.000		0.000		0.000		-		0.000	0.000	0.000	-
Management Services (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Eng Tech Serv (NON-FFRDC)	Various	Various : Various	0.000	0.000		0.099	Nov 2015	0.113	Nov 2016	-		0.113	Continuing	Continuing	Continuing
Mgmt Support Serv	C/CPFF	RBC : Alexandria, VA	0.000	0.000		0.099	Nov 2015	0.112	Nov 2016	-		0.112	Continuing	Continuing	Continuing

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Exhibit R-4, RDT&E Schedule Profile: PB 2017 Navy **Date:** February 2016

Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0605500N / <i>Multi-mssn Maritime Aircraft (MMA) (P-8A)</i>	Project (Number/Name) 3368 / <i>P-8 Improvements</i>
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P-8 Improvements	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021											
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q								
Systems Development																																				
Rapid Capability Insertion									RCI																											

2017OSD - 0605500N - 3368

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Exhibit R-4A, RDT&E Schedule Details: PB 2017 Navy		Date: February 2016
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0605500N / <i>Multi-mssn Maritime Aircraft (MMA) (P-8A)</i>	Project (Number/Name) 3368 / <i>P-8 Improvements</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>P-8 Improvements</i>				
Systems Development: Rapid Capability Insertion: Rapid Capability Insertion	2	2016	4	2021

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Navy **Date:** February 2016

Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0605500N / <i>Multi-mssn Maritime Aircraft (MMA) (P-8A)</i>	Project (Number/Name) 9999 / <i>Congressional Adds</i>
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COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
9999: <i>Congressional Adds</i>	52.817	14.555	12.500	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	79.872
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Congressional Add.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2015	FY 2016
<i>Congressional Add:</i> Small Business Technology Insertion	14.555	12.500
<i>FY 2015 Accomplishments:</i> N/A		
<i>FY 2016 Plans:</i> N/A		
Congressional Adds Subtotals	14.555	12.500

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

Not required for Congressional Adds.

E. Performance Metrics

Not required for Congressional Adds.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Navy **Date:** February 2016

Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0605500N / Multi-mssn Maritime Aircraft (MMA) (P-8A)	Project (Number/Name) 9999 / Congressional Adds
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Product Development (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Primary HW Dev - NAWCAD	WR	NAWC AD : Patuxent River, MD	0.635	0.553	May 2015	1.100	May 2016	0.000		-		0.000	0.000	2.288	-
Primary HW Dev - Progeny	C/CPFF	PROGENY : Manassas, VA	19.453	9.600	Sep 2015	9.800	Sep 2016	0.000		-		0.000	0.000	38.853	29.053
Primary HW Dev - SBIR - Various	Various	Various : Various	25.250	4.402	Sep 2015	1.600	May 2016	0.000		-		0.000	0.000	31.252	29.652
Primary HD Dev - Prototyping - Various	Various	Various : Various	0.000	0.000		0.000		0.000		-		0.000	0.000	0.000	-
Primary HD Dev - Sensor Development	Various	Various : Various	4.800	0.000		0.000		0.000		-		0.000	0.000	4.800	4.800
Subtotal			50.138	14.555		12.500		0.000		-		0.000	0.000	77.193	-

Management Services (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Engineering Services	WR	NAWC AD : Patuxent River, MD	0.458	0.000		0.000		0.000		-		0.000	0.000	0.458	0.458
Mgmt Suppt Serv (NONFFRDC)	C/CPFF	RBC INC : Alexandria,	2.221	0.000		0.000		0.000		-		0.000	0.000	2.221	2.221
Subtotal			2.679	0.000		0.000		0.000		-		0.000	0.000	2.679	2.679

			Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			52.817	14.555	12.500	0.000	-	0.000	0.000	79.872	-

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2017 Navy **Date:** February 2016

Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0605500N / <i>Multi-mssn Maritime Aircraft (MMA) (P-8A)</i>	Project (Number/Name) 9999 / <i>Congressional Adds</i>
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Proj 9999	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021							
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q				
Small Business Technology Insertion																																

2017PB - 0605500N - 9999

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Exhibit R-4A, RDT&E Schedule Details: PB 2017 Navy		Date: February 2016
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0605500N / <i>Multi-mssn Maritime Aircraft (MMA) (P-8A)</i>	Project (Number/Name) 9999 / <i>Congressional Adds</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Proj 9999				
Small Business Technology Insertion: Schedule Detail	1	2015	4	2016